

■ 3.0 Economic Impacts

The provision of transit in federally-managed lands can have national economic implications as well as significant economic benefits for local areas surrounding the sites. These local and overall economic effects can be relevant for project planning as well as for program financing.

Impacts on public and private sector revenues and spending patterns occur as a result of three basic forces: 1) capital investment in equipment and facilities; 2) ongoing transportation system operations; and 3) changes in site visitation and associated visitor spending. The economic impacts can also have very different interpretations, depending on whether they are examined from the viewpoint of the national economy or the viewpoint of local economic development. The economic impacts and benefits on a national and local level are discussed below.



Multi-use Trail, Cuyahoga National Recreation Area, Ohio

3.1 National Perspective

The implementation of transit service requires continued capital investment and ongoing operations activities. Based on the estimated level of investment and ongoing operations for these systems, the following types of economic effects are expected to occur:

- **Increased capital investment in transportation vehicles** – mostly buses, with some waterborne vessels and rail or other types of shuttle systems. Such vehicle purchases support vehicle manufacturers, and associated production-related jobs.
- **Increased capital investment in right-of-way and terminal facilities** – parking lots, benches, shelters, loading docks or piers, vehicle maintenance and storage facilities, and in some cases dedicated travel lanes or other right-of-way improvements. The construction of these facilities would provide construction-related jobs.



Little Round Top, Gettysburg National Military Park, Pennsylvania

- **Increased project development expenditures** – engineering, architecture, and planning design work for new transit projects. These expenditures generate income and jobs for design and planning firms.

- **Increased transportation-related employment** – operating and maintaining transit equipment and facilities that would provide jobs and income for vehicle operators and repair/maintenance workers.
- **Increased spending on suppliers of materials and services** – including suppliers of sheet metal, motors, rubber tires, plastic interior components, and other parts required by the vehicle manufacturers. It would also include suppliers of wood, gravel, cement, structural metal, or other materials needed for the facility construction. It would further include suppliers of motor fuel and replacement parts needed for ongoing operation of the vehicles.
- **Effects caused by the spending of income by workers** – when new jobs are created, they provide new sources of income that generate additional consumer spending demand, which creates the need for additional jobs.

Potential National Level Impacts

The total capital and operating costs of ATS at all of the proposed sites were estimated and then summed to represent the national-level “direct effect” of the ATS program. The spending mix associated with these direct effects was also calculated based on available information about the types of vehicles, facilities and services being proposed.

These direct effects will generate additional flows of income and support additional jobs through the U.S. economy. The calculations of these flows of dollars, and particularly the indirect and induced effects, were calculated using the IMPLAN version of the national input-output model. That national model is primarily based on inter-industry purchase and spending data compiled by the U.S. Department of Commerce, Bureau of Economic Analysis.

Capital investment over the next 20 years, if all the transit needs identified in the study were funded, will involve \$650 million of one-time direct spending, and is estimated to ultimately support over \$1.9 billion in total business output (sales), providing over 16,000 job-years of employment and \$605 million in personal income in the U.S. Due to the equipment-intensive nature of vehicle manufacturing, the capital investment element of the program is expected to support roughly 25 jobs per million dollars of direct expenditure.

Project development expenditures are estimated to be \$90 million over the next 20 years. These professional service purchases are expected to generate \$287 million of output, support 3,500 job-years of employment, and provide \$118 million in income.

Average annual expenditures on operations and maintenance are expected to be \$49 million per year. These expenditures are estimated ultimately to support \$129 million in total business output (sales) each year, providing almost 1,900 jobs and \$54 million in total personal income every year. Due to the more labor-intensive nature of transit operations and maintenance, that element of the program is expected to support roughly 40 jobs for each million dollars in direct spending.

Table 4 summarizes these overall national economic effects described above. It is important to note that national spending on other types of programs or services (instead of transit) could also support jobs and provide income to workers within the U.S. Thus, these

figures represent just the economic effects of spending on the transit program, and do not reflect the opportunity costs of foregoing other possible uses of Federal funds.

Table 4. National Economic Effects
Potential Economic Impacts of Program Investment and Operations

Category	Direct Program Expenditures	Total Effect – National Level		
		Output	Employment	Income
One-time Capital Expenditures	\$650M	\$1,929M	16,600	\$605M
One-time Project Development Expenditures	\$ 90M	\$ 287M	3,500	\$118M
Annual Operations & Maintenance	\$ 49M	\$ 129M	1,900	\$ 54M

All estimates are in 1999 dollars; total effects calculated using IMPLAN model for U.S.

3.2 Local/Regional Perspective

From the perspective of communities in the local area surrounding a Federal lands site, the economic effects of implementing transit are different from the national perspective:

- The effects of changes in *visitor spending* patterns, while viewed as a redistribution of spending at the national level, are potentially very significant for the local economies of affected areas. For some gateway communities, clogged roads, insufficient parking, or other problems of site access are now constraining the number of visitors or the length of time they stay in the community. In some of those cases, transit can expand the number of visitors to the site and expand the amount of visitor spending in the surrounding communities. The aggregate change in local spending is both a measure of direct economic impact on the local economy and an indicator of the increase in site visitation that reflects benefits to site visitors.
- The direct capital investment in *purchases* of transportation vehicles will generally not provide jobs or income to local workers unless there happens to be a manufacturer of transit vehicles in the local area. That does not appear to be the case for most transit sites. Therefore, this analysis assumes that vehicle purchases (bus, boat, etc.) fully affect the national economy but affect the relevant local economies to a much lesser degree.
- The direct spending on *construction* of right-of-way, docks and piers and terminal/maintenance facilities will provide local construction jobs and associated income for workers which would generally not occur without the transit investment. The construction activity would represent a net growth of jobs and income generated in the local area, as long as there are residents of the local area who could travel to the site to work on the construction.

- The direct *operations* activities would provide jobs and associated income for operators and maintenance workers that also will most likely not occur without the transit investment. Operations activity will provide a net growth of jobs and income generated in the local area, as long as there are qualified residents who could travel to work at the site.
- The broader *indirect effects* will be much smaller at the local level than at the national level, since they will occur only insofar as there are some local area suppliers of materials used in manufacturing or delivery of the vehicles (very limited in most cases) or local area suppliers of construction materials and services (generally applicable for most areas).
- The *induced effects* caused by spending of worker income will also represent economic growth at the local level, insofar as it represents additional dollars spent on food, clothing, and other consumer purchases which would not occur without the additional local jobs supported by the transit program.

The localized effects will differ by location, depending on 1) the expected change in visitation to the specific site, 2) the amount of visitor-oriented business activity occurring in surrounding communities, 3) the nature of the proposed ATS system construction and operation, and 4) the size and diversity of the county economic base (as a source of suppliers for related goods and services). Examples of localized effects are illustrated in examples shown in Appendix II.